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ABSTRACT

Part of a 13-volume series designed to help Lutheran communities assess the feasibility of starting a Lutheran elementary school and to assist ongoing schools in current operation, this volume focuses on planning well-designed facilities for Lutheran education. It is based on a two-stage plan in which the school is located for its first few years in already existing facilities and then moves to a new carefully planned building after it is well established. The first part of the publication deals with the initial survey and study stage of facilities planning. The development of educational specifications (including such elements as enrollment, curriculum, staff, and space and equipment needs) is discussed in the second part. Recommendations for selecting and working with an architect are detailed. Site selection is considered, including the utilization or renovation of an already existing building and the evaluation of sites for new construction. Design considerations in planning a new learning facility are enumerated. A final section touches on furnishings, furniture, and equipment. (JM)

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BUILDING AND EQUIPMENT PLANNING

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SURVEY / STUDY / PLANNING
EDUCATIONAL SPECIFICATIONS
ARCHITECT
SITE LOCATION
DESIGNING SPACE FOR TEACHING / LEARNING
FURNISHINGS, FURNITURE, EQUIPMENT
RESOURCES

PLANNING FOR LUTHERAN ELEMENTARY SCHOOLS

EA 012 102

E10

FOREWORD

Lutheran schools in America are flourishing.

Many Lutheran communities are presently conducting feasibility studies to determine if they can have a Lutheran school for their young people. The need for materials to help Lutheran congregations conduct feasibility studies and make responsible educational decisions has become quite urgent.

Through the coordinated efforts and generous financial help of Aid Association for Lutherans, representatives of the educational offices of the Association of Evangelical Lutheran Churches, American Lutheran Church and the Lutheran Church-Missouri Synod have combined their efforts in the development of PLANNING FOR LUTHERAN ELEMENTARY SCHOOLS materials. These materials are companion to PLANNING FOR LUTHERAN HIGH SCHOOLS, and PLANNING FOR LUTHERAN EARLY CHILDHOOD PROGRAMS.

PLANNING FOR LUTHERAN ELEMENTARY SCHOOLS has been designed to help Lutheran communities assess the feasibility of a school for their young people and make plans and responsible decisions for the establishment of a school. Resource materials are intended to assist existing schools in their ongoing operation. While these materials are designed to help congregational leaders, it is advisable to consult with synodical (district or regional) leaders as you begin planning your feasibility study.

Often the principal will be the first person to read this manual. I urge the principal to know the content of this document thoroughly. The principal will order additional copies for those who will benefit from its use. The above is true also for directors of education and early childhood programs.

The work of the following writers is herewith gratefully acknowledged: Dr. Glenn Bracht, Mr. Robert Eggold, Mr. Eldor Kaiser, Mr. Donald Kell, Mr. Ellsworth Kierbs, Dr. Glenn Kraft, Mr. Kenneth Markworth, Mr. Neal Meitler, Rev. Paul Pallmeyer, Mr. Richard Sauer, Mr. Wilbur Tewes and Dr. Martin Wessler. A special word of thanks to the synodical leaders who gave counsel and encouragement in this project: Dr. Victor Constien, Mr. Glenn Moenning, Dr. Al Senske, Dr. Marlin Schultz, Mr. Donald Vetter and Mr. Donald Zimmerman. Thanks to Lois Prahlow for artwork; Jim Reigles for editing; Lois Brandt, Harriette Johnson and Florence Schoenfeldt for typing and Trip Gesch for printing. To Aid Association for Lutherans staff members: Dr. Martin Koehneke, Mr. Fred Pahl, Mr. William Selle and Mr. Donald Stoike thanks for their encouragement and counsel.

These materials are dedicated to the glory of God for the extension of Lutheran education.

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Martin F. Wessler
Project Director

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INTRODUCTION

The process of teaching and learning at the elementary level is exciting and challenging, but it's difficult to get a "handle" on this process, to see it clearly. Why is one school better than another? Why does a child learn much better in this school than in a previous one? What are the key factors involved in the process called Christian education?

Buildings, facilities, equipment, though not the most important, are surely the most visible factor in this process. Think of a school that is known for its excellence. When you tour that school, visit its classrooms, view the displays, you get some visible evidence why it is a successful school. You see important clues to the success of that school - clean, well-kept landscaping, neat, attractive classrooms, colorfully decorated lobby and trafficways, visually appealing displays, sturdy equipment in good repair.

Parents, children, teachers, all want this kind of school. But such a school doesn't "just happen." Work, careful planning and "good housekeeping" are needed. For you who are about to start a new school, a quality school is your dream, your goal. For existing schools planning expansion, renovation, this goal can become a reality. A dull, dingy building can be given a "face-lifting." If your building is old, worn, stodgy, or just plain boring, to begin refurbishing can be a challenge.

This resource document can help you reach the goal of a well-designed building for excellent Christian education. It has been prepared with three situations in mind

- Organizing a new Lutheran school

- Enlarging, renovating an existing building

- Evaluating your present school facility

Our children deserve the best Christian education facilities that we can afford. Excellent Lutheran schools radiate the honest pride of ownership felt by the teachers and sponsoring parish. Lutheran school buildings can show the spirit, "We care enough to give the very best!"

Careful planning is the key! As you begin, catch this vision: A well-designed Lutheran school building provides a helpful setting for learning, a pleasing environment for Christian living. It has an atmosphere that is comfortable, open, and friendly. One senses a mood that is cheerful, relaxed, colorful. The child is within a setting that supports group activities and stimulates effective teaching/learning. The building is functional, adaptable, expandable, designed for multi-purpose use.

Now the challenge is before you - to plan well for educational space for Christian nurture in a Lutheran elementary school. Much work and study is involved but the process will be enriching to you personally and rewarding for all the children and youth of several generations.

SURVEY/STUDY/PLANNING

Your congregation is making a survey leading to a decision to begin a new Lutheran school or to expand or renovate an existing Lutheran school. You have been appointed to the Subcommittee for Buildings and Equipment.

A. SURVEY-STUDY ACTIVITIES

Activity 1: Study these documents: (Get a copy for each member)

- E02-Guidelines for Starting a New School
- E07-Curriculum Planning Guidelines
- E10-Building and Equipment Planning

Activity 2: Become oriented to your task. Study document (E02)

Part One (p. 1-6).

Note Activity #6 on page 3.

Examine the Organization Chart on p. 9.

Study carefully the PLANNING CHART on p. 28a.

Activity 3: Discuss the GO OR NO-GO CHECKLIST, found in E02 p. 59.

Consider item #4.

Activity 4: Give special attention to directions for your subcommittee found in E02 pages 23-25.

Activity 5: Become familiar with the work of the Instruction Planning Subcommittee (See E02 pages 26-28).

Study document E07-Curriculum Planning Guidelines.

Activity 6: Work with the Financial Planning Subcommittee to determine cost of purchase or renovation of a building (see E02 p. 21, Activity 3c).

Activity 7: Study the section in document E10 that refers to providing educational space for the first three years of your new school.

Activity 8: Complete the activities listed in E02 p. 23-24, Phase II. Be prepared to make your report to the board of education.

You have just completed Phase II, the survey process, which led to a GO/NO GO decision. Assuming that the decision of the congregation was to open a school (or enlarge an existing school), you now move into Phase III.

B. STUDY - PLANNING - IMPLEMENTING ACTIVITIES

Your board and its committees have passed their first checkpoint enroute to a new Lutheran school. You've been given the "green-light" to proceed with plans for opening the first year of the school. Your committee must provide the educational space. This begins Phase III on the Planning Chart (E02 p. 28a).

Activity 1: Meet with the Instruction Planning Committee. Study their job description and list of activities found in document E02 pp. 26-28.

Discuss their progress in developing the EDUCATIONAL SPECIFICATIONS for the new school.

Study document E07-Curriculum Planning Guidelines for help in developing these Educational Specifications.

Activity 2: Discuss with this committee their draft copy of the Educational Specifications. Help them clarify their meaning and intent. Be clear in your own mind what implications these specifications have for educational space requirements.

EDUCATIONAL SPECIFICATIONS

The educational specifications for your school will be the most important document your board will draft. It will be important to the architect, for it will describe the educational activities the new building will house and the types of spaces needed to accommodate the educational requirements.

A. ORGANIZING FOR STUDY

The educational specifications are best developed by a task force which includes

1. principal of the school
2. an educational consultant

3. Facility Planning Subcommittee

4. Instruction Planning Subcommittee

This task force should draw on the following resources within the community:

1. Staff of the local school district - central office

2. Educational executive from the regional office of the Lutheran synod

3. City Hall - City Planning and Zoning Commission

4. Education departments of nearby universities

5. State Department of Education

6. Architectural firms specializing in school designs

7. Administrators of Lutheran schools in the area.

B. DEVELOPING EDUCATIONAL SPECIFICATIONS

1. Develop an accurate enrollment estimate

2. Determine the kind of curriculum to be offered

3. Determine how staff will be distributed over the curriculum

4. Determine spaces needed in the building for teaching purposes - classrooms, gym, library, etc.

5. Identify auxiliary spaces needed - offices, storage, etc.

6. Detail the teaching stations based on the program needs, such as square footage of space needed, etc.

7. Define equipment needs for each teaching station and other spaces.

Main features of this document should include

1. Learning activities to be housed in the building

2. Grouping, nature, and number of people involved

3. Spacial relationships

4. Required spaces

5. Required furniture and equipment

6. Special environmental needs

Educational specifications should include the following components:

1. The rationale for this building project

2. A description of the supporting congregation(s)

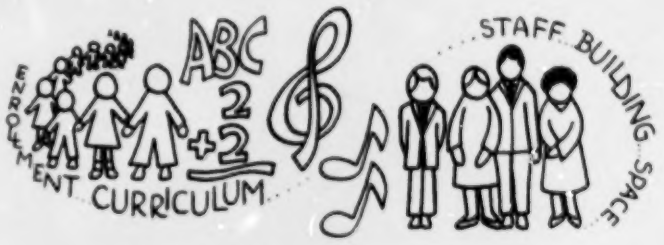
3. The educational plan. Statement of purpose. Goals for the school

4. A description of the teaching/learning areas

5. General building considerations

6. A summary of spacial relationships

7. Summary of requirements



ARCHITECT

The selection of an architect is probably the most important decision the committee will make regarding building and facilities. The selection process should be alert, careful and deliberate. The architect provides the key link between well-developed educational specifications and a creative rendering of these ideal dimensions into well-designed interior space for living, working, teaching and learning.

A. BASIC SERVICES OF AN ARCHITECT

What can an architect do for our project that can't be done just as well, at much lower fee, by an engineer, a skilled draftsman, or perhaps an experienced contractor? Perhaps this is somewhat like comparing a physician with a paramedic. Both can stop your bleeding, but if much more is required, one would be foolish to insist on a medic. In designing educational space, if you are looking no farther ahead than the next five years, perhaps an engineer can do the job. But most school facilities are built to serve well for at least 50 years. If that's your goal, only a skilled architect can give you full service. What are these services?

- Predesign planning
- Schematic designs
- Design development - architectural drawings
- Blueprints and construction specifications
- Bidding procedure
- Construction supervision

B. SELECTING THE ARCHITECT

As with every major profession, some architects are more talented than others. Those who specialize in school design will probably serve your needs much better than commercial or industrial architects. If one were to point out two key criteria from the list below, they would be quality of previous work and proximity to your community. The latter deserves special mention. It is important that your architect be nearby in the early planning stage so full discussion can take place as the preliminary design is being shaped. He is needed during construction, so that the project gets regular, careful inspection. The following criteria are not listed in rank order:

- Registration and professional reputation
- Experience
- Staff and facilities
- Method of operation
- Interest in the project
- Quality of his previous work
- References
- Architectural fee
- Proximity to your community

Somewhere in your community, or nearby, is the architect who is competent, qualified, and just right for your project. If you will take time, be patient and follow the selection process, you will find him and be proud and pleased to have his services. He will earn his fee many times over in the ultimate satisfaction you and your members will enjoy from the completed building. The following process is one that is most common and familiar to architects and will demonstrate to them that you are a responsible client who will function with integrity.

Activity 1: List the architects you wish to invite to submit qualifications. Supply these firms with the following information:

- Name, address and phone of the administrator responsible for your project
- Description of the project, giving brief summary of the educational specifications
- Time schedule proposed for the project
- Brief statement about the involvement of your people in the planning process
- Brief statement of the educational goals, philosophy of the school, and the distinctive process of Lutheran, Christian education
- Statement as to how much money will be invested in this project. What are the financial resources and stability of the congregation.

Activity 2: Ask the invited architects to give you the following information:

- Brief history of the firm, record of growth, types of work completed, any specialties.
- Names and professional qualifications of key staff persons who will work on the project.
- List of projects completed in recent years, with photos.
- List of references - clients, banks, contractors.
- Statement of their procedure during planning, design, construction.

Activity 3: Interview the architects that seem likely candidates

- Visit their offices; meet the staff.
- Make on-site inspection of the recent completed buildings.
- Check their references. Talk to their former clients. Check their credit rating. Verify their standing in the professional organization.

Activity 4: Hold a second, more detailed interview with each of the three top candidates. Clarify any key points with them in writing. Make your final choice. Award the contract for architect.

C. WORKING WITH THE ARCHITECT

Activity 5: Meet with the architect. Describe clearly the unique dimensions of Christian education and the distinctive patterns of Lutheran elementary schools.

Activity 6: Clarify for him the curriculum of your school, the specific process of teaching/learning you will be using. Interpret to him the Educational Specifications. Satisfy yourself that the architect is fully aware of the design and space implications in the above information.

Activity 7: Study carefully the several design options the architect will present to you. These are his rendering of your unique requirements as set forth to him in Activities 5 and 6. These are schematic designs, often roughly sketched floor plans, land-use diagrams, three-dimensional models that will illustrate his ideas about space utilization, traffic patterns, spacial relationships and how the building can best be placed on the site. Study the section in this booklet, DESIGNING SPACE FOR TEACHING/LEARNING, as a help in evaluating the architect's designs.

Activity 8: Make final selection of site, based on educational specifications and architect's schematic designs. Perhaps a site has already been given as a memorial or purchased prior to engaging an architect. If this is the case and the site presents serious problems, your committee

would be well advised to find a more suitable site. A well-planned and carefully designed building can be permanently crippled by a poor site. Study carefully the section in this booklet SITE SELECTION CRITERIA.

Activity 9: Now you have an acceptable site that allows the architect reasonable freedom of design. Engage in full and frank discussion with him about the prominent features of his design. Listen carefully to his reasons. Do they support or hinder the important dimensions of your educational specifications? If you feel he should make changes, now is the time to speak up. Changes, variations, to the overall design can be made now with no problem, no delay.

Activity 10: Discuss with the architect the furnishings, furniture and equipment that you plan to have in the building. Study the section in this booklet giving detailed suggestions for selecting furnishings and equipment.

Activity 11: Approve the final set of schematic designs. Now work can begin on the architectural design. This will involve the work of structural engineers, mechanical engineers (plumbing, heating, cooling, electrical) and a civil engineer for grading and site work. Now the architect can give you a more accurate cost estimate. Minor changes are still possible at this stage, but major changes will cause disruption and delay, and can be rather costly.

Activity 12: Approve the architectural design. Now the architect can begin with the working drawings (construction blueprints). Another important document that begins to take shape now is the architectural specifications. This document will describe the quality of materials, construction methods, installation procedures. This document sets forth the standards of quality for the project and are legally binding on the contractor. Have a competent person on your committee read this document carefully before accepting it.

Activity 13: Approve the working drawings and architectural specifications. By now you know your architect and his firm very well. You know how he works. He has demonstrated his skill, experience and creative insight during the design phase of the project. A helpful spirit of mutual trust and respect has been cultivated. You can now draw on this spirit of trust as the architect guides the process bidding the job and awarding the contracts.

Caution: Do not be shocked if the bids come in considerably higher than the architect's estimate. This is often not his fault. Now you will see the value of your architect, as he modifies the plans, with your permission, without harming the overall design or quality of construction. He will also work with the contractors to make sure they understand the specifications and the construction methods called for. This often encourages a contractor to come in with a lower, revised bid.

Activity 14: Award the construction contracts. Be supportive of your architect as he now functions in his role as supervisor of construction. Avoid dealing directly with the contractor on any feature that is not called for in the working drawings. If you feel there must be a last-minute change made, work with the architect.

If you feel the project is lagging and you are under time pressures to occupy the building, be sure to alert the architect to this as soon as possible. Remember he has other projects besides yours. Alerting him well in advance will avoid a serious time crunch later.

SITE LOCATION

Imagine this situation. The decision has been made to begin a new Lutheran elementary school in your community. A target date has been set for opening the school. Your subcommittee has the job of providing the classrooms and other facilities well in advance of opening date. Perhaps you have less than a year. You must act promptly, responsibly, with good judgment. Consider developing your plans in two stages -

I. Provide classroom facilities for the first three to five years of your school.

II. Locate on an excellent site a carefully planned, well-designed facility to meet the long-range needs of the school.

A. EXPLORING SITE OPTIONS

Look at your situation: You're probably short of time. You have limited funding. Your base-of-support, loyalty and interest among the parents has not yet expanded. The future health, vitality, and survival of your school is not entirely clear. Much of your planning and action is done "on faith"! Don't be discouraged. You can provide adequate facilities for your beginning school in the time given to you, if you will plan carefully and study these options

- Renovate existing education space at the sponsoring churches.
- Lease space in an existing building at another site.
- Purchase an existing building; renovate/remodel it.
- Purchase used relocatable/movable classroom from local school district.
- Choose any reasonable combination of the above options.

Consider remodeling and enlarging the classrooms of your existing church building. Get additional space by purchasing movable classrooms. Many school districts purchased these during the 50's and 60's and now have them for sale. Another option, lease space in an existing building and negotiate with the owner for remodeling and renovation to make the area functional for an educational program. If this is not possible, explore purchase of an existing building. It may not be a school building,but with renovation such a building could serve very well for a few years.

B. SITE SELECTION CRITERIA

Check with your local school district. They may have buildings for sale or maybe planning to close an existing school. Perhaps they cannot find a buyer and would be willing to lease the building for several years. When shopping for existing buildings, give careful consideration to these criteria:

- Convenient to majority of pupils (present and future)
- Close to sponsoring churches
- Safe: No heavy traffic or hazardous industry
- Good police and fire protection
- Healthful: No heavy air or noise pollution
- Away from truck or airplane traffic
- Zoned for schools
- Favorable neighborhood for school
- Available utilities: gas, water, electricity, phone, sewer
- Site easily reached by bus or car
- Site can be expanded: adjacent land available
- Available community services: parks, recreation areas, library, museum, etc.

C. EVALUATING EXISTING BUILDINGS FOR PURCHASE OR LEASE

In addition to the criteria above, give careful consideration to the following factors when selecting existing building for purchase or lease:

- Building availability: At what price?
- Size of building and lot. Enough usable interior space?
- Structural soundness: Age and condition of building
- Cost of utilities in recent years
- Adaptability to remodeling and renovation? At what cost?
- Condition of adjacent properties and neighborhood
- Transportation routes
- Possible resale value

D. EVALUATING SITES FOR NEW CONSTRUCTION

By now your school has gotten off to a good start. It has been operating in a renovated building for 3-5 years. Its staff and enrollment have grown steadily. A sense of loyalty, support and affiliation has grown among the sponsoring parishes. Parents and pupils feel good about the school and are willing to speak up for its support. It's been decided to begin planning for construction of a new facility especially designed as a Christian elementary school. Consider these criteria for the selection of a site for the new building:

- Is the site available? Is the price affordable?

- Estimate the cost of removal of existing unwanted building on the site

- Is the site of the right size and shape?

- Is the "lay-of-the-land" conducive to desirable site development?

- Do lands drain properly? Are soil conditions helpful?

- Study general criteria for selecting site (listed above).

It takes time and effort to have your committee serve as a site selection team, examining sites, studying land-use maps, zoning maps, etc. but the time is well spent. The chart below will help your committee arrive at its final choice of possible sites.

Each factor weighed on a scale of 1-10 for desirability	Site A	Site B	Site C	Site D
Program support				
Ease of acquisition				
Cost of site development				
Cost of utilities				
Aesthetic quality				
Location & centrality to pupil population				
Ease of future expansion				
Future land value				
Possible future resale				
Size and cost of site				
Total evaluation				

E. FINAL SITE SELECTION

When you have narrowed your selection of sites, check each site in detail for the following factors:

- Make several visits to City Hall. Meet with the Zoning Commission. Verify that each site is zoned for school. Are any changes in zoining being contemplated by the Commission that affect the site?

- Check about police and fire protection for each site. What is the arrival time from the nearest fire station? How much fire equipment is stationed there? Is the site beyond the city limits and dependent on volunteer firemen? How often is the area patrolled by police? How many police units are generally assigned to the area?

- Check with the street and highway departments. Are any new highways proposed that will slice through and perhaps cut off large areas of your community from ready access to the site? Will traffic patterns be changed that will make it difficult to reach the site? Will the proposed street improvements put a heavy tax assessment on the site?

- Check with the Chamber of Commerce and Builders Association. Will this area develop in the foreseeable future? What is the price of homes and income level in the area?

- Meet with the planners of the public school district. Do they predict any changes in the public school pattern, either opening or closing schools?

- Visit with residents in the area. Get their attitudes about a private school in their neighborhood. Ask their comments about the quality of life in the neighborhood. How adequately do they rate police and fire protection?

- Check with brokers for insurance rates in this area.

DESIGNING SPACE FOR TEACHING/LEARNING

Years from now you will realize that you have designed and built an ideal learning facility when the

- Teachers and staff find it a pleasant, comfortable place to work

- Children find it interesting, colorful, stimulating, attractive setting for learning

- Parents express a genuine pride of ownership

- Congregation makes efficient use of the building seven days a week for a wide variety of activities

- Building continues to reflect a fresh, clean look.

This response is not impossible! If the task force that develops the educational specifications and the building committee will work closely with the architect and do their "homework" well, they can look forward to an ideal facility at reasonable cost. The factor that makes the difference is planning!

Below are considerations that deserve careful attention. Discuss them with your architect. Inquire about them when you meet with resource persons. Have them in mind when you visit and inspect ideal school buildings. Alert teachers and parents to their importance.

A. DESIGN FEATURES

1. Challenge yourself! Plan boldly, dream, catch the vision of what can be! Encourage creative suggestions. Anticipate the future!

2. Develop a master plan that permits the building complex to be fully completed within ten to twenty years.

3. Acquire enough land for the building site to anticipate future expansion.

4. Design large spaces for multi-purpose use wherever possible.

5. Build to serve the total parish needs, not just the specialized needs of the elementary school.

6. Design to reflect this principle, "form follows function."

7. Don't waste space! Avoid long corridors, large open stairways. Design for the maximum usable interior space.

8. Design interior surfaces (ceilings, walls, floors), with maintenance-free materials.

9. Design for energy conservation - avoid large exterior glass window areas.

10. Design for health, safety and security. Provide direct routes for rapid evacuation of the building. Use fire-safe materials, effective alarm systems for fire and tornado drills. Avoid design features that invite vandalism.

11. Accommodate the handicapped with ramps rather than stairs, handholds in washrooms, broad entryways for wheelchairs.

12. Avoid basements. Design a single-level building.

13. Design for simple cleaning, repair, and maintenance procedures.

14. Design smooth traffic-flow patterns within the building.

15. Design the vehicle approaches to the building to provide safe, efficient loading, unloading of buses, cars and trucks.

B. MARKS OF QUALITY

16. Reflect in the over-all design and prominent features of the building its function and character as a center for Christian nurture for children and families.

17. Use accents and architectural features to give a thematic unity to the building.

18. Anticipate major gifts to be given as dedications, memorials, that can serve as major accent features to the building and to the site (bell tower, fountain, garden, inner courtyard, outdoor amphitheater, outdoor altar, classroom worship areas, outdoor picnic shelter, gazebo, sculpture, mosaics, plaques, symbols, statuary).

19. Let the building exhibit the appropriate dynamics of scale, size and form in designing the approaches, entries, large areas. Design the outdoor approaches to the building for beauty and landscape Relate the building to its campus.

20. Be alert to building decor. Consult designers for use of color, shapes, forms, textures, surfaces.

21. Use an honest,open design. Avoid an "institutional look."

C. TEACHING/LEARNING SPACES

22. Design an interesting learning environment with efficient use of interior space.

23. Provide good lighting, comfortable heating and ventilation, year-round air conditioning, carpeting.

24. Consider open instructional areas rather than traditional "walled-in" classrooms. Open areas avoid the wasted space of corridors and provide flexibility. They can be divided into smaller areas by using movable storage cabinets, book cases, shelving units, chalk boards, display boards.

25. Allow space in the instructional area for private work, small group activities.

26. Design exterior walls with narrow vertical view-strip windows. This will avoid the problem of glare, heat loss in winter and heat gain in summer. It reduces the custodial cost of window cleaning.

27. Consider several smaller washrooms for each area rather than one large washroom.

28. Consider possible cost saving with design of open trusswork ceiling, through which mechanical features can travel. These need not be hidden or covered. A skillful engineer can design the pipes, conduits, ducts, plenums and other fixtures in an open ceiling. By color coding these surfaces, some accents can be added to the room decor.

D. AUXILIARY SPACES

29. Give special attention to the design of the multi-purpose room, gymnasium, food services facilities, student commons, faculty area, health service area, administrative offices.

30. Provide adequate storage for instructional materials, administrative records, cleaning and maintenance equipment, audio-visual instructional equipment, chairs, tables, furniture storage, band and musical instruments. Provide outdoor storage for equipment for lawn and garden, snow removal, etc.

E. ENERGY-SAVING DESIGN FACTORS

Your regional state and federal offices for Department of Energy will give much help to your architect and building committee. For renovation and expansion projects they will insist on an ENERGY AUDIT, a careful walk-through inspection of your building by a licensed energy-auditor. For new construction, the plans and heating/engineering blueprints will be inspected and approved according to the energy-saving standards your state has adopted. In general be alert to these energy-saving practices

- Operate building at lower heating temps in winter and warmer cooling temps in summer. Occupants must dress accordingly.

- Avoid heavy use of exterior doors.

- Maintain a tight well-sealed building. Use calking and weather-stripping.

- Utilize double-door entry for main exterior entryways.

- Fully insulate roof, ceilings, walls.

- Use full-wrap insulation for all heating and cooling pipes, ductwork, storage tanks, heaters.

- Service and maintain, promptly and regularly, furnace and boilers.

- Reduce air-change rates within building.

- Reduce size of large exterior glass areas.

- Use storm window and doors or multi-glaze windows.

- Replace inefficient thermostats.

- Contract for an energy-audit by a professional.

F. DESIGN TO HELP THE HANDICAPPED

You are planning an educational facility that will serve not only the school, but the total parish ministry and the community. With this broad perspective in mind, one will realize that the aged and the handicapped will be using this building for many years. Give their special needs full consideration when designing the building

- Single level building, if possible.

- Ramps rather than stairs.

- Elevator for handicapped in multi-level buildings.

- Long, vertical-handled doorpulls rather than round doorknobs.

- Handrails for hallways. Handholds for washrooms.

- Special design for wheelchair persons at pay phones, drinking fountains, toilets, entranceways, fire alarms.

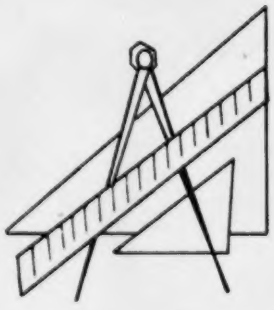
- Parking spaces reserved for disabled persons.

- Deaf persons are warned with flashing lights of fire or tornado.

- Floor-to-ceiling, vertical-view strip windows in each major room so small children and persons in wheelchairs can see out.

- Picture signs mounted at each door to show the purpose of the room for those who cannot read English.

Verify that your architect has checked with your state and city building code requirements for the handicapped.



FURNISHINGS, FURNITURE, EQUIPMENT

As you meet with the architect, in the early planning stages, be alert to the importance of the three factors above in creating an ideal learning environment. Remember teaching/learning does not take place in a vacuum, in empty, bare, space. Children are not robots; they are very human. They respond to color, textures, furnishings, the total school environment.

Architects can help us be aware of the importance of environment and furnishings, with these activities:

Activity 1: Have the architect make several full-color sketches of a fully-furnished classroom in your new building, the entrance-way, the multi-purpose room, the front exterior of the building.

Activity 2: Have the architect lead your committee on a tour of several outstanding school buildings in your area. Take color-slide photos. Take notes of the furnishings, the carpeting, ceiling, window drapes, wall surfaces. List the furniture and equipment in classrooms at each grade level.

Activity 3: Visit with the principal and several teachers from these schools. Note their comments about the learning environment. Get their comments on the school design you are considering.

Activity 4: Interview sales representatives from leading school suppliers in your area to display their furniture and equipment for your faculty and committee. Begin making a cost estimate for furnishings.

Activity 5: As you examine furniture and equipment use a checklist that includes these factors for evaluation:

- appearance
- safety
- installation
- maintenance
- cost
- delivery time
- flexibility
- durability
- guarantees
- adaptable to handicapped persons
- services available from distributor

Activity 6: Have the principal and staff compile a list of furniture and equipment, and furnishings:

a) urgently needed.

b) needed within the first two years

c) needed within the first five years.

Activity 7: Negotiate with the Financial Planning Committee for a timetable for the purchase of the items listed in Activity #6.

Activity 8: Authorize the principal to purchase as many of the items in list 6a as possible, within the agreed dollar limit.

CONCLUSION

Now your building program is completed. Your school is well established. It enjoys good support and a reputation for quality Christian education. You have dedicated your new building, and everyone is proud of it. It was carefully planned and well constructed. It will serve generations of children as a beautiful setting for Christian teaching/learning.

Your committee has done a good job, worked hard. One thing is left to do to wrap up several years of work. Gather your notes, minutes and important correspondence. Bind them into a permanent document. Assemble several copies of the educational specifications, the blueprints, the construction specifications, and other important files. Place these documents in a prominent, safe place in the school office, where future committees and administrators will readily find them! Blessings for a good job well done!

RESOURCES

Checklist: Resources in Christian Education,
Board of Parish Education, St. Louis, MO

Creative Environments for Christian Education, Bulletin,
Board of Parish Education, St. Louis, MO

Guide for Planning Educational Facilities,
Council of Educational Facility Planners, 29 West Woodruff Avenue, Columbus, OH 43210

Planning a Lutheran School, Bulletin 300,
Board of Parish Education, St. Louis, MO

Planning for Lutheran Early Childhood Programs,
Board of Parish Education, St. Louis, MO

Planning the School Site and Building, Bulletin,
Board of Parish Education, St. Louis, MO

The Resources Center for the School and Total Parish, Bulletin 346-2,
Board of Parish Education, St. Louis, MO

So You Want a Learning Center, Bulletin 343-2,
Board of Parish Education, St. Louis, MO

Suggestions for Building a School, Harold E. Warnke,
Board of Education-Wisconsin Synod, 3512 West North Avenue, Milwaukee, WI 53208

PLANNING FOR LUTHERAN ELEMENTARY SCHOOLS

E01	WHY THE LUTHERAN SCHOOL	Rev. Paul Pallmeyer Minneapolis, Minnesota
E02	GUIDELINES FOR STARTING A NEW SCHOOL	Mr. Neal Meitler Dr. Martin Wessler Milwaukee, Wisconsin
E03	BOARD OF EDUCATION HANDBOOK	Dr. Glenn Bracht Waverly, Iowa
E04	PERSONNEL HANDBOOK	Mr. Kenneth Markworth Waverly, Iowa
E05	RECRUITMENT/PUBLIC RELATIONS/TRANSPORTATION HANDBOOK	Mr. Richard Sauer Ft. Wayne, Indiana
E06	LEGAL REQUIREMENTS	Mr. Wilbur Tewes Appleton, Wisconsin
E07	CURRICULUM PLANNING GUIDELINES	Dr. Glenn Kraft Seward, Nebraska
E08	FINANCIAL PLANNING AND ACCOUNTING HANDBOOK	Mr. Neal Meitler Milwaukee, Wisconsin
E09	FUNDING ELEMENTARY SCHOOLS	Mr. Neal Meitler Dr. Martin Wessler Milwaukee, Wisconsin
E10	BUILDING AND EQUIPMENT PLANNING	Mr. Robert Eggold Topeka, Kansas
E11	THE ROLE OF ELEMENTARY SCHOOL IN CHANGING COMMUNITIES	Mr. Donald Kell Ann Arbor, Michigan
E12	PARENTS AS PARTNERS	Mr. Eldor Kaiser Appleton, Wisconsin
E13	MODEL LUTHERAN SCHOOLS	Mr. Ellsworth Kierbs Seward, Nebraska

The above materials can be ordered from:

Board of Parish Education
The Lutheran Church-Missouri Synod
3558 South Jefferson Avenue
St. Louis, Missouri 63118

or

The American Lutheran Church
Mr. Don Vetter
Wartburg College
Waverly, Iowa 50677

The most effective agencies available to the Church for equipping God's people for ministry are the Lutheran elementary and secondary schools.

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